The Journal of
# Membrane Biology

An international journal
for studies
on the structure,
function and genesis of
biomembranes

Volume 147 1995

**Editorial Board**

**W.R. Loewenstein, Woods Hole, Editor-in-Chief**

**Q. Al-Awqati,** Columbia
**B.P. Bean,** Harvard
**G. Blobel,** Rockefeller
**D. Branton,** Harvard
**D. Engelman,** Yale
**S. Fleischer,** Vanderbilt
**J.G. Forte,** California, Berkeley
**J. Handler,** Johns Hopkins
**A. Helenius,** Yale
**A.E. Hill,** Cambridge
**W.L. Hubbell,** California, L.A.
**P.L. Jørgensen,** Copenhagen
**R.B. Kelly,** California, S.F.
**A. Klug,** Cambridge
**E.A.C. MacRobbie,** Cambridge
**V.T. Marchesi,** Yale
**H.M. McConnell,** Stanford
**S. McLaughlin,** SUNY, Stony Brook
**M. Milanick,** Missouri, Columbia
**H. Murer,** Zurich
**G.E. Palade,** California, S.D.
**H. Reuter,** Bern
**B. Sakmann,** Max-Planck, Heidelberg
**R.W. Schekman,** California, Berkeley
**S.G. Schultz,** Texas
**C.L. Slayman,** Yale
**K.R. Spring,** N.I.H.
**C.F. Stevens,** Salk Insititute
**W. Stoeckenius,** California, S.F.
**R.W. Tsien,** Stanford
**H.H. Ussing,** Copenhagen
**G. Yellen,** Harvard

**C.H. Fay,** Assistant to the Editor

Springer

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher.

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Printed in the United States

© 1995 Springer-Verlag New York, Inc.

# Author Index


Aflalo, C., *see* Gheber, L., et al. .....83
Ahern, G.P., *see* Laver, D.R., et al. .....7
Alder, G.M., *see* Korchev, Y.E., et al. .....233
Almonte, C., *see* Levitan, I., et al. .....283
Alper, S.L., *see* Brugnara, C., et al. .....71
Amiel, C., *see* Clerici, C., et al. .....295
Angelides, K.J., *see* Smith, P.R., et al. .....195
Argent, B.E., *see* Verdon, B., et al. .....173
Arispe, N., De Mazancourt, P., Rojas, E.: Direct Control of a Large Conductance $K^+$-selective Channel by G-Proteins in Adrenal Chromaffin Granule Membranes .....109
Armsby, C.C., *see* Brugnara, C., et al. .....71
Arreola, J., Melvin, J.E., Begenisich, T.: Inhibition of $Ca^{2+}$-dependent $Cl^-$ Channels from Secretory Epithelial Cells by Low Internal pH .....95
Bashford, C.L., *see* Korchev, Y.E., et al. .....233
Begenisich, T., *see* Arreola, J., et al. .....95
Benos, D.J., *see* Smith, P.R., et al. .....195
Bootcov, M.R., *see* Martin, D.K., et al. .....305
Breit, S.N., *see* Martin, D.K., et al. .....305
Brugnara, C., Armsby, C.C., De Franceschi, L., Crest, M., Martin Euclaire, M.-F., Alper, S.L.: $Ca^{2+}$-Activated $K^+$ Channels of Human and Rabbit Erythrocytes Display Distinctive Patterns of Inhibition by Venom Peptide Toxins .....71
Campbell, T.J., *see* Martin, D.K., et al. .....305
Chan, H.C., Zhou, W.L., Wong, P.Y.D.: Extracellular ATP Activates Both $Ca^{2+}$ and cAMP-dependent $Cl^-$ Conductances in Rat Epididymal Cells .....185
Chehin, R.N., Rintoul, M.R., Morero, R.D., Farias, R.N.: Differential Effect of Triiodothyronine and Thyroxine on Liposomes Containing Cholesterol: Physiological Speculations .....217
Clay, J.R.: Quarternary Ammonium Ion Blockade of $I_K$ in Nerve Axons Revisited. Open Channel *vs.* State Independent Block .....23
Clerici, C., Couette, S., Loiseau, A., Herman, P., Amiel, C.: Evidence for Na-K-Cl Cotransport in Alveolar Epithelial Cells: Effect of Phorbol Ester and Osmotic Stress .....295
Coraboeuf, E., *see* Leferve, T., et al. .....147
Couette, S., *see* Clerici, C., et al. .....295
Coulombe, A., *see* Leferve, T., et al. .....147
Cremaschi, D., Vallin, P., Porta, C.: Hydrochlorothiazide Action on the Apical $Cl^-$, $Ca^{2+}$ and $K^+$ Conductances in Rabbit Gallbladder Epithelium. Presence of an Apamin-sensitive, $Ca^{2+}$-activated $K^+$ Conductance .....159
Crest, M., *see* Brugnara, C., et al. .....71
De Franceschi, L., *see* Brugnara, C., et al. .....71
De Mazancourt, P., *see* Arispe, N., et al. .....109
Dulhunty, A.F., *see* Laver, D.R., et al. .....7
Eager, K.R., *see* Laver, D.R., et al. .....7
Eder, C., Fischer, H.-G., Hadding, U., Heinemann, U.: Properties of Voltage-gated Potassium Currents of Microglia Differentiated with Granulocyte/Microphage Colony-stimulating Factor .....137
Farias, R.N., *see* Chehin, R.N., et al. .....217
Fisahn, J., Lucas, W.J.: Spatial Organization of Transport Domains and Subdomain Formation in the Plasma Membrane of *Chara corallina* .....275
Fischer, H.-G., *see* Eder, C., et al. .....137
Fournier, F., *see* Humez, S., et al. .....207
French, P.W., *see* Martin, D.K., et al. .....305
French, R.J., *see* Zamponi, G.W. .....1
Garber, S.S., *see* Levitan, I., et al. .....283
Ghazi, A., *see* Leferve, T., et al. .....147
Gheber, L., Priel, Z., Aflalo, C., Shoshan-Barmatz, V.: Extracellular ATP Binding Proteins as Potential Receptors in Mucociliary Epithelium: Characterization Using [$^{32}$P]3′-O-(4-Benzoyl)benzoyl ATP, a Photoaffinity Label .....83
Gray, M.A., *see* Verdon, B., et al. .....173
Guilbault, P., *see* Humez, S., et al. .....207
Hadding, U., *see* Eder, C., et al. .....137
Heinemann, U., *see* Eder, C., et al. .....137
Herman, P., *see* Clerici, C., et al. .....295
Ho, Y.-K., *see* Oh, U., et al. .....241
Humez, S., Fournier, F., Guilbault, P.: A Voltage-dependent and pH-sensitive Proton Current in *Rana esculenta* Oocytes .....207
Junankar, P.R., *see* Laver, D.R., et al. .....7
Kasianowicz, J.J., *see* Korchev, Y.E., et al. .....233
Kim, D., *see* Oh, U., et al. .....241
Korchev, Y.E., Bashford, C.L., Alder, G.M., Kasianowicz, J.J., Pasternak, C.A.: Low Conductance States of a Single Ion Channel are not 'Closed' .....233
Laver, D.R., Roden, L.D., Ahern, G.P., Eager, K.R., Junankar, P.R., Dulhunty, A.F.: Cytoplasmic $Ca^{2+}$ Inhibits the Ryanodine Receptor from Cardiac Muscle .....7
Lefevre, T., Coraboeuf, E., Ghazi, A., Coulombe, A.: Divalent Cation Channels Activated by Phenothiazines in Membrane of Rat Ventricular Myocytes .....147
Levitan, I., Almonte, C., Mollard, P., Garber, S.S.: Modulation of a Volume-regulated Chloride Current by F-actin .....283
Liu, J., *see* Wangemann, P., et al. .....255, 263
Loiseau, A., *see* Clerici, C., et al. .....295
Lucas, W.J., *see* Fisahn, J. .....275
Marcus, D.C., *see* Wangemann, P., et al. .....263
Martin Euclaire, M.-F., *see* Brugnara, C., et al. .....71
Martin, D.K., Bootcov, M.R., Campbell, T.J., French, P.W., Breit, S.N.: Human Macrophages Contain a Stretch-sensitive Potassium Channel that is Activated by Adherence and Cytokines .....305
Matsumoto, G., *see* Sato, C. .....45
Melvin, J.E., *see* Arreola, J., et al. .....95
Mollard, P., *see* Levitan, I., et al. .....283
Morero, R.D., *see* Chehin, R.N., et al. .....217
Oh, U., Ho, Y.-K., Kim, D.: Modulation of the Serotonin-activated $K^+$ Channel by G Protein Subunits and Nucleotides in Rat Hippocampal Neurons .....241
Pasternak, C.A., *see* Korchev, Y.E., et al. .....233
Pedemonte, C.H.: Inhibition of Na+-Pump Expression by Impairment of Protein Glycosylation is Independent of the Reduced Sodium Entry into the Cell .....223
Porta, C., *see* Cremaschi, D., et al. .....159
Priel, Z., *see* Gheber, L., et al. .....83
Rintoul, M.R., *see* Chehin, R.N., et al. .....217
Roden, L.D., *see* Laver, D.R., et al. .....7
Rojas, E., *see* Arispe, N., et al. .....109
Rosenberg, R.L., *see* Townsend, C. .....121
Roy, G.: Amino Acid Current through Anion Channels in Cultured Human Glial Cells .....35
Sato, C., Matsumoto, G.: Sodium Channel Functioning Based on an Octagonal Structure Model .....45
Shen, Z., *see* Wangemann, P., et al. .....263
Shiga, A., *see* Wangemann, P., et al. .....255
Shipley, A., *see* Wangemann, P., et al. .....263

Shoshan-Barmatz, V., *see* Gheber, L., et al. . . . . .83
Smith, P.R., Stoner, L.C., Viggiano, S.C., Angelides, K.J., Benos, D.J.: Effects of Vasopressin and Aldosterone on the Lateral Mobility of Epithelial Na+ Channels in A6 Renal Epithelial Cells . . . . . .195
Stoner, L.C., *see* Smith, P.R., et al. . . . . .195
Townsend, C., Rosenberg, R.L.: Characterization of a Chloride Channel Reconstituted from Cardiac Sarcoplasmic Reticulum . .121
Vallin, P., *see* Cremaschi, D., et al. . . . . .159
Verdon, B., Winpenny, J.P., Whitfield, K.J., Argent, B.E., Gray, M.A.: Volume-activated Chloride Currents in Pancreatic Duct Cells . . . . . .173
Viggiano, S.C., *see* Smith, P.R., et al. . . . . .195
Wangemann, P., Liu, J., Shen, Z., Shipley, A., Marcus, D.C.: Hypo-osmotic Challenge Stimulates Transepithelial $K^+$ Secretion and Activates Apical $I_{sK}$ Channel in Vestibular Dark Cells . . . . . .263
Wangemann, P., Liu, J., Shiga, N.: The pH-sensitivity of Transepithelial $K^+$ Transport in Vestibular Dark Cells . . . . . .255
Whitfield, K.J., *see* Verdon, B., et al. . . . . .173
Winpenny, J.P., *see* Verdon, B., et al. . . . . .173
Wong, P.Y.D., *see* Chan, H.C., et al. . . . . .185
Zamponi, G.W., French, R.J.: Sodium Current Inhibition by Internal Calcium: A Combination of Open-channel Block and Surface Charge Screening? . . . . . .1
Zhou, W.L., *see* Chan, H.C., et al. . . . . .185